UPPER ILLINOIS RIVER LANDSCAPE MANAGEMENT PROJECTS
ILLINOIS VALLEY RANGER DISTRICT - SISKIYOU NATIONAL FOREST
PROPOSED ACTION - JUNE 1999

The Forest Service activities that are proposed for Fiscal Years 2000 to 2004 in the Upper Illinois River Landscape Management Project are located in the East Fork Illinois Watershed. National Forest lands in this watershed are located in the central portion of the Illinois Valley Ranger District. The East Fork Illinois River Watershed is within the western Siskiyou Mountains of the Klamath Geological Province (see attached planning area maps).

There are approximately 37,000 acres or 64% of this watershed in National Forest lands. This watershed is a combination of public lands which include wilderness and managed lands, private lands, agriculture lands, and portions of the city of Cave Junction and the town of Takilma.

The East Fork Illinois River Watershed is designated as a Key Watershed in the Northwest Forest Plan, though portions of the Project Proposed Action are in a non-key portion of that watershed.

The Siskiyou National Forest Land and Resource Management Plan (Forest Plan) has identified eight management areas within the project area. The management goals of these Management Areas are:

MA14 - General Forest - Provide multiple-use development opportunities and a high yield of timber, subject to multiple use constraints.

MA13 - Partial Retention Visual - Protect scenic values while providing multiple-use development opportunities that are visually subordinate to the characteristic landscape.

MA12 – Retention Visual – Provide a level of attractive scenery by maintaining the area in a natural or near natural condition.

MA11 - Riparian Reserve - Protect intrinsic values of ecosystems bordering bodies of water and wetlands while providing limited multiple-use development opportunities.

MA9 – Special Wildlife Site – Protect or enhance unique wildlife habitats and small botanical sites.

MA8 – Late-Successional Reserve or Managed Late-Successional Areas – Protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth forest related species including the northern spotted owl.

MA6 – Backcountry Recreation (Chicago Non-Motorized) – Maintain or recreate an essentially undeveloped condition and provide a recreation setting that is appropriate to facilitate Primitive and Semi-primitive, Non-motorized recreation use.

MA1 – Wilderness (Siskiyou Wilderness) – Preserve the wilderness character and maintain the natural conditions of each wilderness; and assure that changes which take place in the natural conditions are the result of natural rather than human processes.

Adjacent to the Forest Service boundary and within the watershed boundary is private land. The Illinois Valley Ranger District does not propose private lands for any land management activities. However, the District is interested in cooperating with others to help restore watershed health.

In 1994, the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (Northwest Forest Plan) amended Forest Service and BLM planning documents. The attached Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (Northwest Forest Plan) presented a combination of land allocations and standards and guidelines to protect and enhance habitat for late-successional and old-growth forest related species.

Approximately 5000 acres of upland, or non-riparian lands, on National Forest Lands within the East Fork Watershed planning area are designated as matrix. Matrix is where most of the scheduled timber harvest will occur on Federal lands. Standards and guidelines from the Northwest Forest Plan assure appropriate conservation of ecosystems as well as provide habitat for rare and lesser-known species.

Most activities proposed within the Upper Illinois River Landscape Management Project fall with the Kingfish, Cougar Ridge, and Elder Trail project areas. These areas have been identified on the Illinois Valley Ranger District's Five-Year Action Plan.

EXISTING CONDITION

The East Fork Illinois Watershed's elevation ranges from 6370 feet in the Siskiyou Wilderness (Lookout Mountain) to 1600 feet in Takilma. As with the majority of watersheds on the Siskiyou National Forest, its frequent fire interval has been interrupted. As a result the encroachment and density of understory vegetation is creating species/density conditions out of its historic range. Populations of sugar pine, ponderosa pine and Jeffrey pine are declining in the watershed. Large diameter sugar pines, which have survived past periodic fire events, remain scattered across the watershed.

On many sites, increased density levels have increased the water stress on the older over-story trees. In areas where ponderosa pine and sugar pine comprise the over-story, these large trees are dying at an increased rate due to bark beetles. Douglas-fir has also been effected.

These density levels have also increased fuel loading, especially in areas that historically had frequent low and moderate intensity fires. With the suppression of these fires, the fuel loading will now support large, intense fires rather than low intensity fires. This is especially evident in the Douglas-fir and tanoak plant series. These higher fuel loadings threaten existing older forest habitat with a higher potential for stand replacement fire.

The East Fork Illinois River Watershed is partially encompassed by the Bolan Lake Viewshed. The Bolan Lake Viewshed (Management Area 13) is approximately 11,925 acres. Approximately 3,400 acres of the MA-13 are located within the watersheds that delineate the East Fork Upper Illinois River Landscape Management Project boundary.

The East Fork Illinois River Watershed contains unique features such as fens, bogs and meadows. Port-Orford cedar is found in the watershed, as is its associated root rot. The East Fork Illinois River is a major tributary and contributor to the water quality and anadromous and resident fisheries of the mainstem of the Illinois River.

PROPOSED ACTION: Vegetation Treatments

On National Forest Lands, the Upper Illinois River Landscape Management Project proposes vegetation management treatments for Fiscal Years 2000 to 2004. These include the Kingfish, Elder Trail and Cougar Ridge Timber Sales. In addition, managed stands within the East Fork Illinois River watershed are proposed for density management treatments.

The Kingfish Timber Sale proposes vegetation management activities for fiscal year 2000. It proposes to treat 619 acres yielding approximately 6.5 MMBF of commercial timber. It would utilize final shelterwood removal, density management, regeneration, and small group selection silvicultural treatments.

Kingfish Timber Sale Proposed Action Summary

Harvest Prescription	Treatment Acres	Harvest Volume (MBF)	Logging Systems	Fuels Prescription
Final Shelterwood Removal	55	324	Tractor	Jackpot
Density Management	483	3998	Tractor, Mobile Skyline,	Underburn
Regeneration	35	1360	Mobile Skyline, Tractor	Broadcast Burn
Small Group Selection	39	610	Mobile Skyline	Underburn
Sanitation, Hazard Removal	7	42	Tractor	Underburn

The Elder Trail Timber Sale proposes vegetation management activities for fiscal year 2000. It proposes to treat 282 acres yielding approximately 3.5 MMBF of commercial timber. It would utilize a combination of density management and small group selection silvicultural treatments.

Elder Trail Timber Sale Proposed Action Summary

Harvest Prescription	Treatment Acres	Harvest Volume (MBF)	Logging Systems	Fuels Prescription
Density Management and Small Group Selection	280	3322	Helicopter, Mobile Skyline, Tractor	Underburn
Density Management	2	24	Mobile Skyline	Underburn

The Cougar Ridge Timber Sale proposes vegetation management activities for fiscal year 2002. It proposes to treat 147 acres yielding approximately 1.3 MMBF of commercial timber. It would utilize a density management silvicultural treatment.

Cougar Ridge Timber Sale Proposed Action Summary

Harvest Prescription	Treatment Acres	Harvest Volume (MBF)	Logging Systems	Fuels Prescription
Density Management	147	1320	Mobile Skyline	Underburn

In addition to the three timber sales detailed above, 596 acres of managed stands are proposed for density management treatments during Fiscal Years 2001-2004. These treatments would yield approximately 3.2 MMBF of commercial timber. Managed stands are stands composed of young trees resulting from regeneration, seed tree or shelterwood harvest prescriptions. Generally, these stands were harvested in the 1950's with a few stands being harvested in the early to mid 1960's. Eleven managed stands proposed for treatments are within a Late-Successional Reserve.

Managed stands would be harvested using mobile skyline, tractor and helicopter yarding systems. All stands are proposed for underburns to treat existing fuels, as well as fuels resulting from logging operations. Spot piling and burning of slash concentrations along roadways is proposed.

Treatment acres and the resulting harvest volumes displayed above should be considered approximate. It is expected that acres and volumes will decrease based on the results of surveys and associated protection buffers for survey and manage species.

In addition to the vegetation treatments identified above, individual tree salvage of recent and imminent mortality is proposed for harvest units, along haul routes and within a sale's area in general. It is approximated that 650 MBF of timber volume is associated with salvage activities.

Density management is a treatment that reduces stand density within existing plantations and natural stands. In the East Fork Illinois River Watershed it is also used in densely stocked immature stands to increase or maintain tree growth by redistributing the site's growth potential among the remaining trees. The most dominant trees with the fullest crowns are favored for retention while the trees that are dying would be harvested. This prescription will also maintain species diversity, particularly ponderosa pine and sugar pine.

Even-aged regeneration harvests have historically been referred to as clearcut, shelterwood, or seed tree harvests depending on the amount of green trees retained. Considering today's implementation strategies, even-aged regeneration harvest is different than clearcuts of the past that left few or no green trees following harvest. The even-aged harvest prescription proposed in the Upper Illinois River Landscape Management Projects would retain at least 15% of the original stand. A regeneration harvest would retain reserve trees for wildlife habitat and recruitment of large woody materials. The Agency would reforest lands within five years of timber harvest.

The uneven-aged small group selection prescription removes small groups of trees at each harvest entry, which for this project area are typically two decades apart. Each entry will create 15 – 20% of the stand in openings. Openings created may vary from the width of a few tree crowns up to two acres to allow for regeneration and growth of less shade tolerant species. Reserve trees would remain in the openings. Opening over one acre will be planting with seedling stock and include subsequent vegetation treatments to ensure survival. Over time, a multi-aged stand is created, consisting of a mosaic of very small even-aged groups or aggregations.

The shelterwood harvest system is an even-aged system in which a new stand is established under the protection of a partial canopy of trees. In a final shelterwood removal the old stand is removed in a series of two or more harvest cuts, the last of which removes the overstory seed trees (shelterwood trees) when the new even-aged stand is well established. As with even-aged regeneration harvest, shelterwood harvests will retain at least 15% of the original stand after harvest in accordance with Northwest Forest Plan specifications for timber harvest on matrix lands

Individual Tree Salvage of recent tree mortality will consider Occupational Health and Safety (OSHA) standards, impeded road access (in the event of blowdown across Forest roads), and large woody material standards and guidelines.

Several of the stands being proposed for vegetation treatments have developed under the influence of the 1987 Longwood Fire. In these stands, the Longwood Fire created a stand mosaic by underburning the stands. As opposed to a stand replacement fire, these stands had dense understory vegetation removed through wildfire.

Several managed stands (plantations) proposed for density management are within the Late-Successional Reserve land management allocation. The objective of these treatments are to promote late-successional characteristic within these individual stands thereby provide for increased habitat connectivity across the landscape.

The use of site-specific silvicultural systems is proposed to meet overall stand, landscape and Regional objectives of biological diversity, wildlife habitat, fuels reduction, and timber productivity. These

prescriptions also follow the Ecosystem Management Direction established by the Chief of the Forest Service.

Most proposed harvest units include or are bordered by perennial or intermittent streams. The Upper Illinois River Landscape Management Projects Proposed Action does not propose entries or treatments within Interim Riparian Reserves. Interim Riparian Reserve widths are defined by the Northwest Forest Plan. Alternatives developed subsequent to the Proposed Action may include riparian reserve treatments. Treatments within Riparian Reserves, if developed, would be based on analysis contained in the revised East Fork Illinois River Watershed Analysis. The East Fork Illinois River Watershed Analysis, when completed, will be incorporated into the environmental analysis of the Upper Illinois River Landscape Management Project.

After harvest is complete fuels management strategies are proposed to reduce logging slash. Fuels management strategies include spot piling (handpiling) and burning, that is, roadside concentrations of logging slash are gathered into piles and ignited or utilized as needed.

Handpiling and burning is designed to remove 50 to 75 percent of fuels between 1 and 6 inches in diameter and greater than 2 feet in length. Piles are then covered to create a dry ignition point and piles are burned in the fall or early winter after some precipitation has fallen.

Many harvest units are proposed for underburns. The objective of this treatment is to reduce fuel concentrations throughout the stand, thereby reducing the risk of a large wildfire in the future. Underburns will also reduce unwanted understory vegetation. All burning would comply with Oregon State Smoke Management Guidelines. Underburn fuels treatments are proposed in concert with the reintroduction of fire into the watershed (see below).

Timber harvest will be accomplished through the combination of tractor, mobile skyline, multispan and helicopter (aerial) yarding systems. Tractor yarding is a ground-based system where logs are pulled (skidded) to landings using a tractor or skidder. Entire or portions thereof nine units are proposed for tractor yarding. Designated skid trails will be utilized to meet resource protection criteria.

The mobile skyline method is a cable system that allows flexibility to meet a variety of site-specific objectives. The helicopter method employs helicopters to lift logs out of harvest units with little disturbance to the ground. Per Forest Plan direction, adequate large woody material would be left on each site to maintain wildlife habitat, site productivity, and a healthy forest ecosystem.

The multispan is a skyline method using one or more intermediate support trees. This method provides increased deflection that enables logs to be lifted such that it maintains partial suspension. The multispan method can extend yarding distances for a long reach skyline system without the need for additional roading or aerial logging systems (helicopter). Using this system can result in roads being located higher on a hillside, leading to less excavation and environmental impacts.

PROPOSED ACTION: Roaded Access

With a few exceptions, existing roads in the Upper Illinois River Landscape Management Projects planning area are generally considered adequate to access proposed vegetation treatment units. New road construction of nine segments totaling 3.7 miles would be needed to access units. These nine segments would become permanent roads on the District's transportation system. Approximately 4.5 miles of road reconstruction on roads 4804 and 4804028 is proposed to access several units.

Approximately 2.0 miles of temporary spur road construction is proposed to access 10 units. All temporary spur roads would be minor specification roads that would be removed after the project is completed.

Due to the geology of the project area, helicopter-landing locations are considered to be adequate to access units identified in the Proposed Action. The proposed sites lend themselves to landing locations based on their proximity to units, size, parent material and slope. Some earthwork is expected to meet OSHA safety guidelines and the helicopter landings will be designed, permanent, and maintained landings.

PROPOSED ACTION: Prescribed Fire

The Upper Illinois River Landscape Management Projects proposes to underburn approximately 4100 acres within the watershed boundary. These acres are located within five main areas. These areas are; 470 acres surrounding Elder Mountain, approximately 260 acres on the north side of Page Creek, 760 acres surrounding the headwaters of Page Creek, 1100 acres surrounding the North Fork Dunn Creek, and 1400 along the lower East Fork Illinois River southwest of the community of Sunstar.

Prescribed burning would include approximately 300 acres of Jeffrey Pine savanna on serpentine influenced soils and approximately 3800 acres of mixed conifer and hardwood forest with some serpentine influence. Burning is proposed within and outside proposed harvest units boundaries. All prescribed burning is proposed for implementation on National Forest Lands.

The return of fire into the ecosystem of the East Fork Illinois River Watershed would be designed to meet objectives associated with fire management, and fish and wildlife goals.

Fish and wildlife habitat goals are to move stand conditions and their innate habitat to conditions that more closely resemble pre-fire-suppression conditions. This is accomplished by reducing the encroaching understory vegetation (especially brush and small conifers) and increasing the amount of grass/forb cover. Prescribed fire is proposed to enhance habitat for animals and rare plants associated with early seral vegetation (particularly in the Jeffrey pine savanna). Prescribed fire would also maintain and restore older forests by reducing understory vegetation densities, which will reduce the potential for stand replacement fires. Impacts to overstory trees would be minimized on both Jeffrey pine savanna and forested areas.

The fire management goals are to reduce future fire suppression costs and the potential for high intensity wildfires by reducing ladder fuels and creating a shaded fuel break. Prescribed fire is proposed to reduce the impacts to this drainage from future severe stand replacement wildfire and provide safer areas to initiate fire suppression efforts.

The implementation of prescribed fire is designed to be consistent, in part, with the Siskiyou National Forest Wildfire Prevention Analysis and Plan and the Siskiyou Forest Plan, as amended by the Northwest Forest Plan.

PROPOSED ACTION: Road Treatments

A thorough review of the transportation system on National Forest Lands within the East Fork Illinois River Watershed will be undertaken during the alternative analysis process. This will include a review of road segments in need of storm proofing, decommissioning or closure (Level 1).

Activities associated with storm proofing include; drivable dips are implemented at stream crossings, culverts and other designated locations. Inlet and outlet improvements are implemented. Culvert sizing is reevaluated usually resulting in upgrades. Activities may include new surfacing, a narrower road width, and stabilization of cut/fills and changing the road template to out-sloping. Roads can be open seasonally or year-round.

Activities associated with decommissioning result in the road no being longer drivable. All culverts are removed and sites are rehabilitated. Non-drivable waterbars constructed to intercept ditches and springs. The road is blocked (usually by earthen barrier).

Activities associated with placing a road under a Level 1 maintenance status include: the road is closed with earthen barrier or gate. Maintenance to culverts includes partial fill removals (culverts left in and some fill taken out) or complete removal. Waterbars are implemented and the road may be drivable.

Specific roads and their associated treatments will be based, in part, on analysis and recommendations contained in the revised East Fork Illinois River Watershed Analysis.